

WHAT IS CLAIMED IS:

1. A non-aqueous secondary battery, comprising:  
a positive electrode,  
a negative electrode, and  
an electrolytic solution, which is charged or discharged by repeating a reaction of intercalating and deintercalating ions at said positive electrode and said negative electrode, respectively, wherein  
said negative electrode comprises graphite powder which has a particle size equal to or smaller than 100  $\mu\text{m}$  and which has an intensity ratio ( $P_2/P_1$ ) equal to or less than 0.92, wherein  $P_1$  is a diffraction peak of hexagonal crystal structure which appears in a range of the diffraction angle from 41.7 degrees to less than 42.7 degrees and  $P_2$  is a diffraction peak of rhombohedral crystal structure which appears in a range of the diffraction angle from 42.7 degrees to 43.7 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.
2. A non-aqueous secondary battery as claimed in claim 1, wherein said graphite has an intensity ratio ( $P_2/P_1$ ) equal to or less than 0.92, wherein  $P_1$  is a diffraction peak which appears in a range of the diffraction angle from 41.7 degrees to 42.7 degrees and  $P_2$  is a diffraction peak which appears in a range of the diffraction angle from 42.7 degrees to 43.7 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.
3. A non-aqueous secondary battery as claimed in claim 1, wherein said graphite has an intensity ratio ( $P_3/P_1$ ) equal to or less than 0.75, wherein  $P_1$  is a diffraction peak which appears in

a range of the diffraction angle from 41.7 degrees to 42.7 degrees and  $P_3$  is a diffraction peak which appears in a range of the diffraction angle from 45.3 degrees to 46.6 degrees in a x-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

4. A non-aqueous secondary battery, comprising:  
a positive electrode,  
a negative electrode, and  
an electrolytic solution, which is charged or discharged by repeating a reaction of intercalating and deintercalating ions at said positive electrode and said negative electrode, respectively, wherein

said negative electrode comprises graphite powder which has a particle size equal to or smaller than  $100\ \mu\text{m}$  and which has an intensity ratio ( $P_3/P_1$ ) equal to or less than 0.75, wherein  $P_1$  is a diffraction peak of hexagonal crystal structure which appears in a range of the diffraction angle from 41.7 degrees to less than 42.7 degrees and  $P_3$  is a diffraction peak of rhombohedral crystal structure which appears in a range of the diffraction angle from 45.3 degrees to 46.6 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

5. A non-aqueous secondary battery as claimed in claim 4, wherein said graphite has an intensity ratio ( $P_2/P_1$ ) equal to or less than 0.92, wherein  $P_1$  is a diffraction peak which appears in a range of the diffraction angle from 41.1 degrees to 42.7 degrees and  $P_2$  is a diffraction peak which appears in a range of the diffraction angle from 42.7 degrees to 43.7 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

6. A non-aqueous secondary battery as claimed in claim 4, wherein said graphite has an intensity ratio ( $P_3/P_1$ ) equal to or less than 0.75, wherein  $P_1$  is a diffraction peak which appears in a range of the diffraction angle from 41.7 degrees to 42.7 degrees and  $P_3$  is a diffraction peak which appears in a range of the diffraction angle from 45.3 degrees to 46.6 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

7. Electrodes for a non-aqueous secondary battery, comprising:

- a positive electrode, and
- a negative electrode, wherein

said negative electrode comprises graphite powder which has a particle size equal to or smaller than  $100\ \mu\text{m}$  and which has an intensity ratio ( $P_2/P_1$ ) equal to or less than 0.92, wherein  $P_1$  is a diffraction peak of hexagonal crystal structure which appears in a range of the diffraction angle from 41.7 degrees to less than 42.7 degrees and  $P_2$  is a diffraction peak of rhombohedral crystal structure which appears in a range of the diffraction angle from 42.7 degrees to 43.7 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

8. Electrodes for a non-aqueous secondary battery as claimed in claim 7, wherein said graphite has an intensity ratio ( $P_2/P_1$ ) equal to or less than 0.92, wherein  $P_1$  is a diffraction peak which appears in a range of the diffraction angle from 41.7 degrees to 42.7 degrees and  $P_2$  is a diffraction peak which appears in a range of the diffraction angle from 42.7 degrees to

43.7 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

9. Electrodes for a non-aqueous secondary battery as claimed in claim 7, wherein said graphite has an intensity ratio ( $P_3/P_1$ ) equal to or less than 0.75, wherein  $P_1$  is a diffraction peak which appears in a range of the diffraction angle from 41.7 degrees to 42.7 degrees and  $P_3$  is a diffraction peak which appears in a range of the diffraction angle from 45.3 degrees to 46.6 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

10. Electrodes for a non-aqueous secondary battery, comprising:

a positive electrode, and

a negative electrode, wherein

said negative electrode comprises graphite powder which has a particle size equal to or smaller than 100  $\mu\text{m}$  and which has an intensity ratio ( $P_3/P_1$ ) equal to or less than 0.75, wherein  $P_1$  is a diffraction peak of hexagonal crystal structure which appears in a range of the diffraction angle from 41.7 degrees to less than 42.7 degrees and  $P_3$  is a diffraction peak of rhombohedral crystal structure which appears in a range of the diffraction angle from 45.3 degrees to 46.6 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

11. Electrodes for a non-aqueous secondary battery,  
comprising:

a positive electrode, and

a negative electrode, wherein

said negative electrode comprises graphite powder which has an intensity ratio ( $P_2/P_1$ ) equal to or less than 0.92, wherein  $P_1$  is a diffraction peak of hexagonal crystal structure which appears in a range of the diffraction angle from 41.7 degrees to less than 42.7 degrees and  $P_2$  is a diffraction peak of rhombohedral crystal structure which appears in a range of the diffraction angle from 42.7 degrees to 43.7 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.

12. Electrodes for a non-aqueous secondary battery, comprising:

a positive electrode, and

a negative electrode, wherein

said negative electrode comprises graphite powder which has an intensity ratio ( $P_3/P_1$ ) equal to or less than 0.75, wherein  $P_1$  is a diffraction peak of hexagonal crystal structure which appears in a range of the diffraction angle from 41.7 degrees to less than 42.7 degrees and  $P_3$  is a diffraction peak of rhombohedral crystal structure which appears in a range of the diffraction angle from 45.3 degrees to 46.6 degrees in a X-ray diffraction pattern with the  $\text{CuK}\alpha$  line.